

**DEL E. WEBB SCHOOL OF CONSTRUCTION
ARIZONA STATE UNIVERSITY
TEMPE, AZ 85287-0204**

CURRICULUM VITA

CLIFFORD J. SCHEXNAYDER, Ph.D., P.E.

Eminent Scholar, Emeritus

EDUCATION

Ph.D., Purdue University (Construction Engineering and Management) 1980

M.S.C.E., Georgia Institute of Technology (Construction) 1972

B.S.C.E., Georgia Institute of Technology, 1967

Air War College, Air University, Maxwell AFB, 1978

Command and General Staff Officer Course (Honor Graduate), U.S. Army Command and General Staff College, 1977

U.S. Army Engineer School

Facilities Engineer Management Course, 1985

Advance Management Course, 1980

Engineer Officer Advance Course, 1975

AREA OF TEACHING AND RESEARCH

Construction Engineering, Construction Equipment and Techniques, Heavy Construction Estimating, Construction Estimating, and Geotechnical Engineering.

Academic Experience

June 2003 – present. Emeritus Eminent Scholar, Del E. Webb School of Construction, Arizona State University, Tempe, Arizona.

Mar. – June 2004. Lady Davis Visiting Professor, Israel Institute of Technology, Technion City, Haifa, Israel.

July – Nov. 2003. Fulbright Lecturer/Research Scholar, Universidad de Piura, Piura, Perú

August 1994 – June 2003. Eminent Scholar, Del E. Webb School of Construction, Arizona State University, Tempe, Arizona.

April 2002. Visiting Professor, Departamento de Ingenieria Civil, Universidad de Piura, Perú.

July 2000 – Dec. 2000. Visiting Professor, Department of Civil and Environmental Engineering, U.S. Air Force Academy, Colorado.

August 1993 - August 1994. Visiting Associate Professor, Department of Civil Engineering, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

September 1983 - May 1986. Adjunct Professor (part-time), Department of Civil Engineering, Louisiana Tech University, Ruston, Louisiana.

September 1980 - May 1983. Associate Professor, Department of Civil Engineering, Louisiana Tech University, Ruston, Louisiana.

January 1978 - August 1980. Graduate Instructor, Department of Civil Engineering, Purdue University, West Lafayette, Indiana.

Academic Experience Military

February 1994 – March 1998. Adjunct Faculty Member, U.S. Army Engineer School, Fort Leonard Wood, Missouri.

May 1993 – March 1998. Adjunct Faculty Member, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas.

June 1980. Instructor, 3291 USAR School, U.S. Army Command and General Staff Officer course, University of Southern Mississippi, Hattiesburg, Mississippi.

February 1968 - October 1968, Tactical Officer, U.S. Army Engineer School, Fort Belvoir, VA

Industrial Experience

June 1988 - August 1993, Chief Engineer, Nello L. Teer Company, Durham, North Carolina. Officer of the Corporation and of Sloan Construction Company, Inc. (a wholly owned subsidiary company). Qualifying party for North Carolina Contractors License. Direct line responsibility for the coordination and supervision of both the estimating and construction of major Heavy/Highway and Environmental projects. Provided management, administrative and technical direction.

August 1986 - May 1988, Engineer, Granite Construction Company, Grapevine, Texas.

Established Granite's Texas estimating office in August 1986. This office was primarily responsible for working with the Heavy Division Estimating Group, located in California, in developing bids for rehabilitation and new construction of major highway and dam projects throughout Texas. Had responsibility for both site investigations and estimating.

June 1983 - July 1986, Engineer, T. L. James Company, Inc., Ruston, Louisiana.

Responsible for planning and estimating construction for major heavy construction projects: locks and dams, power plants, interstate highways, and environmental work. Owners included Transportation Departments, Corps of Engineers, and private corporations.

June 1972 - December 1977, Area Engineer, Atlas Construction Company (a subsidiary company of T. L. James Company, Inc.), Covington, Louisiana.

Responsible for field engineering and surveying on interstate highway and development projects in southeast Louisiana.

Military Experience, U. S. Army, Corps of Engineers, Colonel (retired)

U. S. Army Reserve

March 1996 – March 1998, Executive Director, Directorate of Military Programs, Office of the Chief of Engineers, Washington, D. C.

May 1990 - March 1996, Deputy Commander, New England Division, Corps of Engineers, Waltham, Massachusetts.

April 1989 - May 1990, Army Engineer Staff Officer, Office of the Chief of Engineers, Washington, D.C.

June 1983 - April 1989, Assistant for Engineering, Little Rock District, Corps of Engineers, Little Rock, Arkansas.

August 1980 - May 1983, Emergency Operations Officer, Rock Island District, Corps of Engineers, Rock Island, Illinois.

February 1978 - August 1980, Control Group (Reinforcement)

June 1980, 3291 USAR School, University of Southern Mississippi, Hattiesburg, Mississippi.

May 1979 - August 1979, Chief, Admin. Team, Reserve Component Evaluation Headquarters, Camp Beauregard, Louisiana.

August 1978, Assistant Operations Officer, S-3, 588th Engineer Battalion(C), Ft. Polk, Louisiana.

May 1978, Assistant Operations Officer, S-3, 326th Engineer Battalion, 101st Airborne, Ft. Campbell, Kentucky.

September 1971 - December 1973, Control Group Standby.

Louisiana National Guard

February 1976 - January 1978, Operations Officer, S-3, 205th Engineer Battalion, Bogalusa, Louisiana.

December 1973 - January 1976, Company Commander, B Company, 205th Engineer Battalion, Franklinton, Louisiana.

Active Duty

November 1969 - September 1971, Geotechnical Research Engineer, Soil-Dynamics Branch, U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, Mississippi.

Managed the high over pressure geotechnical laboratory testing program for the ground motion and soil-structure interaction studies supporting the SAFEGUARD Ballistic Missile Defense System design and construction.

April 1967- October 1969, Several U.S. Army, Corps of Engineers assignments at various locations in the United States and Thailand.

Assignments including BCT, AIT, OCS, Tactical Officer, platoon leader and staff officer.

HONORS/DISTINCTIONS

Professional Registration

Professional Engineer:

Arizona #28571	Louisiana #13696	South Carolina #13009
Georgia #18970	North Carolina #15213	Texas #61387

Awards

John O. Bickel Award, of the American Society of Civil Engineers, for the paper "Drill and Blast Tunneling Practices," *Practice Periodical on Structural Design & Construction*, ASCE, Aug. 2002, awarded 2004.

The Lady Davis Fellowship, for teaching /research in the Department of Civil and Environmental Engineering, The Technion, Haifa, Israel, spring 2004.

Fulbright Scholar Lecturing/Research Award sponsored by the U.S. Department of State, Bureau of Educational and Cultural Affairs. (Universidad de Piura, Piura, Peru) fall 2003.

Tasher H. Bliss Award of The Society of American Military Engineers, for outstanding contributions to military engineering education and promoting recognition of the importance of technical leadership in the National Defense establishment, 2001.

Outstanding Achievements in Research, College of Engineering, Louisiana Tech University, 1982.

Distinguished Engineering Service Award, Louisiana Tech University, 1980 & 1981.

National Honors

Chi Epsilon, Civil Engineering National Honor Fraternity

Military Awards

Legion of Merit

Army Commendation Medal, 1971, 1988

Army Reserve Components Achievement

National Defense Service

Vietnam Service Medal

Republic of Vietnam Campaign Medal

PUBLICATIONS

Refereed Archival Journal Papers

Telem, Dory; Shapira, Aviad; Goren, Ytzhak D.; and Schexnayder, Cliff J., "Moving a Reinforced-Concrete Building: a Case Study," *Journal of Construction Engineering and Management*, ASCE, **CO/2004/00**, submitted June 2004.

Lavy, Sarel; Shapira, Aviad; Botanski, Yuval; and Schexnayder, Cliff J., "The Challenges of Stadium Construction – a Case Study," *Practice Periodical on Structural Design & Construction*, ASCE, **SC/2004/22348** accepted, June 2004.

Ruesta, Jessica Carolina, Salazar, J. Reyes, and Schexnayder, Cliff J., "Constructing a Physical Model of the Piura River," *Practice Periodical on Structural Design & Construction*, ASCE, **SC/2003/022xxx** accepted with revisions Jan. 2004.

Vegas, Sara R., Salazar, J. Reyes, and Schexnayder, Cliff J., "The Use of Rock Blocks to Protect the Downstream Zone of a Hydraulic Discharge Structure," *Practice Periodical on Structural Design & Construction*, ASCE, **SC/2003/022327** accepted Nov. 2003.

Carbajal, Fabio, Ruiz, Gaby, and **Schexnayder, Cliff J.**, "Quincha Construction in Peru," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 10, No. 1, Feb. 2005, pp. ??-??.[SC/2003/022324](#).

Schexnayder, Cliff, Knutson, Kraig, and Fente, Javier. "Describing a Beta Probability Distribution Function for Construction Simulation," *Journal of Construction Engineering and Management*, ASCE, Vol. 131, No. 1, Jan/Feb. 2005, pp. ??-??.

Perry, Courtland R., **Schexnayder, Cliff J.**, and Knutson, Kraig "Constructing a Scenic Bridge," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 9, No. 4, Nov. 2004, pp. 216-220.

Schexnayder, Cliff, Sandra L. Weber, and Scott A. David. "Transportation Agency Use of Owner-Controlled Insurance Programs," *Journal of Construction Engineering and Management*, ASCE, Vol. 130, No. 3, Aug. 2004, pp. 517-524.

Girmscheid, Gerhard and **Schexnayder, Cliff J.**, "Tunnel Boring Machine Developments," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 8, No. 3, Aug. 2003, pp. 150-163.

James, David M. and **Schexnayder, Cliff J.**, "Issues in Construction of a Unique Heavily-Reinforced Concrete Structure," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 8, No. 2, May 2003, pp. 94-101.

Zelasko, Steve and **Schexnayder, Cliff J.**, "Competitive Bid vs. Negotiated Bid in the Commercial Construction Industry," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 8, No. 2, May 2003, pp. 118-121.

Schexnayder, Cliff, and David, Scott A. "Past and Future of Construction Equipment – Part IV," *Journal of Construction Engineering and Management*, ASCE, Vol. 128, No. 4, Jul/Aug. 2002, pp. 279-286.

Girmscheid, Gerhard and **Schexnayder, Cliff J.**, "Drill and Blast Tunneling Practices," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 7, No. 3, Aug. 2002, pp. 125-133.

Ruhnke, Josh and **Schexnayder, Cliff J.**, "A Description of Tilt-Up Concrete Wall Construction," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 7, No. 3, Aug. 2002, pp. 103-110.

King, Cynthia and **Schexnayder, Cliff J.**, "Tower Crane Selection at the Jonathon W. Rogers Surface Water Treatment Plant Expansion," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 7, No. 1, Feb. 2002, pp. 5-8.

David, Scott A. and **Schexnayder, Cliff J.**, "Placement of AASHTO Type 6 Modified Bridge Girders," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 7, No. 1, Feb. 2002, pp. 9-13.

Schexnayder, Francis S. and **Schexnayder, Cliff J.**, "Understanding Project Site Conditions," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 6, No. 2, May 2001, pp. 66-69.

David, Scott A. and **Schexnayder, Cliff J.**, "Hoisting "Y" Columns at the Phoenix Airport Parking Garage Expansion," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 5, No. 4, Nov. 2000, pp. 138-141.

Schexnayder, Cliff, "John F. Stevens – A Great Civil Engineer," *Journal of Construction Engineering and Management*, ASCE, Vol. 126, No. 5, Sept/Oct. 2000, pp. 325-330.

Maio, Cristiano, **Schexnayder, Cliff**, Knutson, Kraig and Weber, Sandra, "Probability Distribution Functions for Construction Simulation," *Journal of Construction Engineering and Management*, ASCE, Vol. 126, No. 4, July/Aug. 2000, pp. 285-292.

Javier, Fente, **Schexnayder, Cliff**, and Knutson, Kraig, "Defining a Probability Distribution Function for Construction Simulation," *Journal of Construction Engineering and Management*, ASCE, Vol. 126, No. 3, May/June 2000, pp. 234-241.

James J. Ernzen and **Schexnayder, Cliff**, "One Company's Experience with Design-Build: Labor Cost Risk and Profit Potential," *Journal of Construction Engineering and Management*, ASCE, Vol. 126, No. 1, Jan./Feb. 2000, pp. 10-14.

Ernzen, James J., **Schexnayder, Cliff J.** and Flora, Gwen, "Design-Build Effects on a Construction Company: A Case Study," *Transportation Research Record, Journal of the Transportation Research Board*, No. 1654, Transportation Research Board, National Research Council, August 1999, pp. 181-187.

Tulloss, Michael D. and **Schexnayder, Cliff J.**, "Horizontal Directional Boring at the Lewis Prison Complex," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 4, No. 3, Aug. 1999, pp. 119 & 120.

Shapira, Aviad and **Schexnayder, Clifford J.**, "Selection of mobile cranes for building construction projects," *Construction Management & Economics*, (UK), 1999, (17), pp. 519-527.

Seneviratne, Indunil, **Schexnayder, Cliff J.**, and Wiesel, Avi. "Establishing a World Wide Presence," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 4, No. 2, May 1999, pp. 69-74.

Schexnayder, Cliff J., "Dealing with Nighttime Construction Nuisances," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 4, No. 2, May 1999, pp. 77-82.

Schexnayder, Cliff, Weber, Sandra L., and Brooks, Brentwood T., "Effect of Truck Payload Weight on Production," *Journal of Construction Engineering and Management*, ASCE, Vol. 125, No. 1, Jan./Feb. 1999, pp. 1-7.

Gwen Flora, James J. Ernzen and **Schexnayder, Cliff**, "Field-level Management's Perspective of Design-Build," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 3, No. 4, Nov. 1998, pp.1-6.

Ohrn, L. Greg and **Schexnayder, Cliff**, "Performance-Related Specifications for Highway Construction," *Journal of Construction Engineering and Management*, ASCE, Vol. 124, No. 1, Feb. 1998, pp.25-30.

Schexnayder, Cliff and Ohrn, L. Greg, "Highway Specifications - Quality vs. Pay," *Journal of Construction Engineering and Management*, ASCE, Vol. 123, No. 4, Dec. 1997, pp. 437-443.

Ohrn, L. Greg and **Schexnayder, Cliff**, "Effect of Performance-Related Specifications on Highway Construction," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 2, No. 4, Nov. 1997, pp. 25-30.

Walker, Kenneth K., **Schexnayder, Cliff**, Mayo, Richard E., and Walsh, Kenneth D., "Methods and Procedural Considerations in Demolishing Tall Concrete," *Journal of Construction Engineering and Management*, ASCE, Vol. 122, No. 3, Sept. 1996, pp. 223-230.

Schexnayder, Cliff J., "Compaction Specifications for Low Hydraulic Conductivity Clay Embankments," *Transportation Research Record, Journal of the Transportation Research Board*, No. 1462, Transportation Research Board, National Research Council, December 1994

Steward, Rita F. and **Schexnayder, Cliff J.**, "Construction Techniques for Roller-Compacted Concrete," *Roller-Compacted Concrete Pavements and Construction*, Transportation Research Record, Journal of the Transportation Research Board, No. 1062, Transportation Research Board, National Research Council, 1986.

Steward, Rita F. and **Schexnayder, Cliff J. Jr.**, "Production Estimating for Draglines," *Journal of Construction Engineering and Management*, ASCE, Vol. III, No. 1, March 1985.

Schexnayder, C. J. and Hancher, Donn E., "Inflation and Equipment Replacement Economics," *Journal of the Construction Division, Proceedings, ASCE*, Vol. 108, No. CO2, June 1982.

Schexnayder, C. J. and Hancher, Donn E., "Contractor Equipment Management Practices," *Journal of the Construction Division, Proceedings, ASCE*, Vol. 107, No. CO4, December 1981.

Schexnayder, C. J. and Hancher, Donn E., "Interest Factor in Equipment Economics," *Journal of the Construction Division, Proceedings, ASCE*, Vol. 107, No. CO4, December 1981.

Refereed Archival Journal Paper Discussions

Schexnayder, Cliff, discussion of "Rational Equipment Selection Method Based on Soil Conditions," by Ali Touran, Thomas C. Sheahan, and Emre Ozcan, *Journal of Construction Engineering and Management*, ASCE, Vol. 124, No. 6, Nov./Dec. 1998, p. 506.

Schexnayder, Cliff, discussion of "Optimizing Haul Unit Size and Number Based on Loading Facility Characteristics," by Douglas D. Gransberg, *Journal of Construction Engineering and Management*, ASCE, Vol. 124, No. 2, Mar./Apr. 1998, p. 171.

Schexnayder, Cliff, discussion of "Analysis of Earth-Moving Systems Using Discrete-Event Simulation," by S. D. Smith, J. R. Osborne, and M. C. Forde, *Journal of Construction Engineering and Management*, ASCE, Vol. 123, No. 2, June 1997, p. 199.

Refereed Archival Journal Paper Closures

Zelasko, Steve and **Schexnayder, Cliff J.**, "Competitive Bid vs. Negotiated Bid in the Commercial Construction Industry," *Practice Periodical on Structural Design & Construction*, ASCE, Vol. 8, No. 2, May 2003, pp 118-121, **accepted Nov. 03.**

Archival Journal Editorials

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 10, No. 1, Feb. 2005, pp. ??.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 9, No. 4, Nov. 2004, pp. 191-193

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 9, No. 3, Aug. 2004, pp. 130-135.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 9, No. 2, May. 2004, pp. .

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 9, No. 1, Feb. 2004, pp. 5-8.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 8, No. 4, Nov. 2003, pp. 186-189.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 8, No. 3, Aug. 2003, pp. 133-136.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 8, No. 1, Feb. 2003, pp. 1-6.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 7, No. 4, Nov. 2002, pp. 138-140.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 7, No. 2, May 2002, pp. 45-47.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 7, No. 1, Feb. 2002, pp. 1-4.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 6, No. 4, Nov. 2001, pp. 142-147.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 6, No. 3, Aug. 2001, pp. 99-103.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 6, No. 2, May 2001, pp. 59-65.

Schexnayder, Cliff, "Construction Forum" of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 6, No. 1, Feb. 2001, pp. 12-16.

Schexnayder, Cliff, "Construction News and Notes," Construction Forum of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 5, No. 4, Nov. 2000, pp. 136 & 137.

Schexnayder, Cliff, "Construction Division Diamond Jubilee," Construction Forum of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 5, No. 3, Aug. 2000, pp. 91 & 92.

Schexnayder, Cliff, "Do You Know What's Important?" Construction Forum of the Practice Periodical on Structural Design & Construction, ASCE, Vol. 4, No. 4, Nov. 1999, p. 130.

International Conference Proceeding (Reviewed Papers and Abstracts)

Schexnayder, C., and Knutson, K., (June 1-4, 2005). " The Men Who Developed the First Steam Shovels." *33rd Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Toronto, Canada. **submitted.**

Schexnayder, C., and Knutson, K., (June 2-5, 2004). "Ancient Construction Engineers of the Peruvian Desert." *32nd Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Saskatoon, Saskatchewan, Canada. GC-67.pdf.

Perry, Courtland, **Schexnayder, C.**, and Knutson, K., (June 4-7, 2003). "Hutton Hill Bridge." *31st Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Moncton, New Brunswick, Canada. GCC-111.pdf.

Schexnayder, C., Knutson, K., and Fiori, C. (June 4-7, 2003). "Construction of the Hoosac Tunnel." *31st Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Moncton, New Brunswick, Canada. GCK-112.pdf.

Knutson, Kraig and **Schexnayder, Cliff J.**, "The Men Who Built the First Ship Canal and Locks at Sault Ste. Marie," *30th Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Montreal, Canada, June 2002.

Schexnayder, Cliff J., "Mitigation of Construction Noise Nuisances," *The Eight East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-8)*, Institute of Engineers, Singapore, Paper No. 1012, Dec. 2001.

Schexnayder, Francis S., and **Schexnayder, Cliff J.**, "Construction Dewatering at a Dam Site Without a River," *The Eight East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-8)*, Institute of Engineers, Singapore, Paper No. 1013, Dec. 2001.

Hunkele, Lester and **Schexnayder, Cliff J.**, "Contracting for the Pentagon," *29th Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Victoria, Canada, June 2001. C50.

Schexnayder, Francis S., and **Schexnayder, Cliff J.**, "Unexpected Requirement for Construction Dewatering at the Eastside Reservoir Project's West Dam," *29th Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Victoria, Canada, June 2001. C25.

Knutson, Kraig and **Schexnayder, Cliff J.**, "Building the Alcan Highway Pioneer Road During WWII," *29th Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Victoria, Canada, June 2001. A35.

Knutson, Kraig, **Schexnayder, Cliff**, and Fente, Javier, "Formulation of a Probability Distribution Function for Construction Process Control," *17th IAARC, International Symposium on Automation and Robotics in Construction*, The International Association for Automation and Robotics in Construction, Taipei, Taiwan, 18-20 Sept. 2000, pp. 697-702.

Ernzen, James J. and **Schexnayder, Cliff J.**, "Controlling Highway Construction Noise," *28th Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, London, Ontario, Canada, June 7-10, 2000, pp. 181-188.

Knutson, Kraig, and **Schexnayder, Cliff J.**, "John F. Stevens' Canadian Railroading Experiences," *28th Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, London, Ontario, Canada, June 7-10, 2000, pp. 134-141.

Schexnayder, Cliff, "Mitigation of Construction Nuisances," *Cities and Sustainability: Sustaining Our Cultural Heritage*, Conference Proceeding, The Millennium Conference Sri Lanka 2000, Feb. 2000, pp. 7/61-7/67.

Cristiano Maio, and **Schexnayder, Cliff**, "Simulation Model Probability Distribution Functions – Relationships between Input Data and Good-of-fit Tests," *Proceedings of the 16th IAARC/IFAC/IEEE, International Symposium on Automation and Robotics in Construction*, The

International Association for Automation and Robotics in Construction, Madrid, Spain, 22-24 Sept. 1999, pp. 103-108.

Schexnayder, Cliff J., Wiezel, Avi, and Ruwanpura, J. Y. "Using the Internet to Transfer Knowledge," *1999 Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Regina, Saskatchewan, Canada, June 2-5, 1999, Vol. IV, pp. 21-30.

Schexnayder, Cliff J. and Wiezel, Avi, "The Use of the Internet as a Tool to Transfer Knowledge," *Etkin Seminar, National Building Research Institute, Technion, Haifa, Israel*, May 1998.

National Conference Proceedings (reviewed papers and abstracts)

Fiori, Christine and **Schexnayder, C. J.**, "Leadership Challenges Facing State Department's of Transportation – On the Right Track or Heading for Disaster?" *2004 Construction Research Congress, Proceedings of the Congress*, ASCE, Mar. 2004.

Schexnayder, C. J., and Badger, William W., "Full Circle in Construction Education?" *Construction Research Congress, Winds of Change: Integration and Innovation in Construction, Proceedings of the Congress*, ASCE, 19-21 Mar. 2003.

Schexnayder, Cliff J., Spencer, Corey, Moreno, Robert, and Semmens, John, "An Improved Method for Measuring Highway Agency Performance," CD-ROM of papers 81st Annual Meeting, Transportation Research Board, National Research Council, Washington, D. C., January 2002.

Schexnayder, Cliff, "The Nighttime Construction Enigma – Traffic Volume vs Community Nuisances," *Construction and Materials Issues 2001*, Proceedings of Construction Institute Sessions at the ASCE 2001 Civil Engineering Conference, Houston, Texas, ASCE, October, 2001. pp. 65-75.

Hansen, Kenneth D. and **Schexnayder, C. J.**, "Construction of Stair-Stepped Soil-Cement Bank Protection," *Soil-Cement and other Construction Practices in Geotechnical Engineering*, Geotechnical Special Publication No. 95, Proceedings of the Geo-Denver 2000 Specialty Conference, ASCE, Aug. 2000, pp. 1-12.

Birch, Sheryl, **Schexnayder, C. J.**, and Weber, Sandra, "Arizona DOT Construction Site Accident Experience," *Construction Congress VI, Proceedings of the Congress*, ASCE, Feb. 2000, pp. 640-649.

Schexnayder, Cliff, "Mitigation of the Highway Construction Noise Nuisance," *Proceedings of inter-noise 99*, The 1999 International Congress on Noise Control Engineering, Institute of Noise Control Engineering, Dec. 1999, pp. 1009-1014.

Fente, Javier, Knutson, Kraig, and **Schexnayder, Cliff**, "Defining a Beta Distribution for Construction Simulation," *WSC '99, 1999 Winter Simulation Conference Proceedings*, Association for Computing Machinery, The Institute of Electrical and Electronic Engineers and The Society for Computer Simulation International, Dec. 1999, 1010-1015.

Wiezel, Avi, Chasey, Allan, and **Schexnayder, Cliff J.**, "Building a Web Site for Construction Organizations," *Proceedings of the 35th 1999 Annual Conference*, Associated Schools of Construction, April 1999, 285-297.

Schexnayder, Cliff J., Wiezel, Avi, and Seneviratne, Indunil, "Construction Professionals and the Internet," *Proceedings of the 35th 1999 Annual Conference*, Associated Schools of Construction, April 1999, 349-362.

Schexnayder, Cliff J. and Wiezel, Avi, "Construction Education Using the World Wide Web," *ASEE 1998 Annual Conference Proceedings*, American Society for Engineering Education, June 1998, CD-ROM.

Also publisher on line by The Foundation Coalition, <http://www.foundation.ua.edu/publications/asee98.htm>

Wiezel, Avi, **Schexnayder, Cliff J.**, and Walsh, Ken, "Meeting the Computer Competency Expectations of the Construction Industry," *Proceedings for the International Conference on Microelectronic Systems Education, MSE '97*, IEEE Computer Society, IEEE Computer Society Press, Los Alamitos, CA, July, 1997, pp.39-40.

Schexnayder, Cliff J., "Compaction Specifications for Low Hydraulic Conductivity Clay Embankments," 73rd Annual Meeting, Transportation Research Board, National Research Council, Washington, D. C., January 1994.

Schexnayder, Cliff and Lukas, Robert G., "The Use of Dynamic Compaction to Consolidate Nuclear Waste," *Grouting, Soil Improvement and Geosynthetics*, Geotechnical Special Publication No. 30, ASCE, February 1992.

Lukas, Robert G. and **Schexnayder, Cliff**, "Dynamic Compaction of Nuclear Waste Deposits," *Stabilization and Solidification of Hazardous Radioactive and Mixed Wastes*, ASTM STP1123, 2nd Vol., January 1992.

Books and Book Chapters Authored

Schexnayder, Cliff J., and Richard E. Mayo, *Construction Management Fundamentals*, First Edition, McGraw-Hill, Inc., ISBN 0-07-281877-8, May 2003.

Peurifoy, Robert L., and **Schexnayder, Cliff J.**, *Construction Planning, Equipment & Methods*, Sixth Edition, McGraw-Hill, Inc., June 2001.

Peurifoy, Robert L., Ledbetter, William B., and **Schexnayder, Cliff J.**, *Construction Planning, Equipment & Methods*, Fifth Edition, McGraw-Hill, Inc., November 1995.

Books Edited

Weber, Sandra Christensen, *Scheduling Construction Projects Principles and Practices* manuscript and page proof editor, Pearson Prentice Hall, New Jersey, 2005.

Schexnayder, Cliff J., editor, *Soil-Cement and other Construction Practices in Geotechnical Engineering*, Geotechnical Special Publication No. 95, Proceedings of the Geo-Denver 2000 Specialty Conference, ASCE, Aug. 2000

Schexnayder, Cliff J., editor, Proceedings of the Specialty Conference on Construction Equipment and Techniques for the Eighties, ASCE, January 1982

Manuals Authored

Schexnayder, Cliff J., *Earthmoving Operations*, FM 5-434, Department of the Army, 15 June 2000.

Papers Presented at International Conferences

Knutson, Kraig and **Schexnayder, Cliff J.**, "The Men who Built the First Ship Canal and Locks at Sault Ste. Marie," *30th Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Montreal, Canada, 7 June 2002.

Schexnayder, Cliff J., "Mitigation of Construction Noise Nuisances," *The Eight East Asia-Pacific Conference on Structural Engineering & Construction (EASEC-8)*, Institute of Engineers, Singapore, Paper No. 1012, Dec.5, 2001.

Knutson, Kraig, and **Schexnayder, Cliff J.** "John F. Stevens' Canadian Railroading Experiences," *2000 Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, London, Canada, June 8, 2000.

J. J. Ernzen and **Schexnayder, Cliff J.** "Controlling Highway Construction Noise," *2000 Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, London, Canada, June 8, 2000.

Schexnayder, Cliff, "Mitigation of Construction Nuisances," Cities and Sustainability: Sustaining Our Cultural Heritage, The Millennium Conference Sri Lanka 2000, Kandalama, Sri Lanka, Feb. 22-24, 2000.

Cristiano Maio, and **Schexnayder, Cliff**, "Simulation Model Probability Distribution Functions – Relationships between Input Data and Good-of-fit Tests," *16th IAARC/IFAC/IEEE, International Symposium on Automation and Robotics in Construction*, The International Association for Automation and Robotics in Construction, Madrid, Spain, 22 Sept. 1999.

Schexnayder, Cliff J. Wiezel, Avi, and Ruwanpura, J. Y. "Using the Internet to Transfer Knowledge," *1999 Annual Conference of the Canadian Society for Civil Engineering (CSCE)*, Canadian Society for Civil Engineering, Regina, Saskatchewan, Canada, June 3, 1999.

Schexnayder, Cliff J. and Wiezel, Avi, "The Use of the Internet as a Tool to Transfer Knowledge," *Etkin Seminar, National Building Research Institute, Technion, Haifa, Israel*, May 1998.

Papers Presented at National Conferences

Schexnayder, Cliff, "Synthesis of State Highway Agency use of OCIPs," 81st Annual Meeting, Transportation Research Board, National Research Council, Washington, D. C., January 2002.

Schexnayder, Cliff, "An Improved Method for Measuring Highway Agency Performance," 81st Annual Meeting, Transportation Research Board, National Research Council, Washington, D. C., January 2002.

Schexnayder, Cliff, "The Nighttime Construction Enigma – Traffic Volume vs Community Nuisances," Construction Institute Session at the ASCE 2001 Civil Engineering Conference, Houston, Texas, 19 October, 2001.

Schexnayder, Cliff, "Mitigation of the Highway Construction Noise Nuisance," The 1999 International Congress on Noise Control Engineering, Institute of Noise Control Engineering, Ft. Lauderdale, Florida, 7 Dec. 1999.

Schexnayder, Cliff J. and Wiezel, Avi, "Construction Education Using the World Wide Web," 1998 ASEE Annual Conference, American Society for Engineering Education, Seattle, Washington, June 1998.

Schexnayder, Cliff J., "Equipment Rental Rates, Understanding the Effect of Assumptions," *Equipment Resources Management Into The 21st Century, Conference Proceedings*, ASCE, 1995. (Nashville, TN, November 13-15, 1994)

Schexnayder, Cliff J., "Kaolin Clay as a Containment Barrier, Specifications & Construction," Clay Minerals Society, 30th Annual Meeting, San Diego, California, September 1993.

Schexnayder, Cliff and Wahls, Harvey E., "Construction of a Kaolin Clay Cap for Buried Nuclear Waste," *Design and Construction Issues at Hazardous Waste Sites, Conference Proceedings*, U. S. Environmental Protection Agency, Washington D. C., EPA/540/8-91/012, May 1991. (Conference, Dallas, Texas, 1 May 1991)

Lewis, Chris R. and **Schexnayder, Cliff J.**, "Production Analysis of the CAT 245 Hydraulic Hoe," *Proceedings of the Conference on Earthmoving and Heavy Equipment*, ASCE, February 1986.

Schexnayder, Cliff J., "Excavation Equipment Session Summary," *Proceedings of the Conference on Earthmoving and Heavy Equipment*, ASCE, February 1986.

Schexnayder, Cliff J., "Project Finance Session Summary," *Proceedings of the Conference on Earthmoving and Heavy Equipment*, ASCE, February 1986.

Schexnayder, C. J., "Inflation's Effect on Equipment Replacement Economics," American Society for Engineering Education, 89th Annual Conference, University of Southern California, 22 June 1981.

Reports

Independent Research Assessment of Project Management Factors Affecting Department of Energy Project Success, prepared for the U.S. Department of Energy, by the Civil Engineering Research Foundation (CERF), member of the CERF Independent Research Team, October 2004.

Schexnayder, Cliff J., Weber, Sandra L., and Fiori, Christine (DEWSC), NCHRP Project 20-07/Task 152 report, *Project Cost Estimating a Synthesis of Highway Practice*, Transportation Research Board, National Research Council, (June) 2003.

Schexnayder, Cliff, and Weber Sandra L., (DEWSC), NCHRP Synthesis 308, Owner Controlled Insurance Programs, Transportation Research Board, National Research Council, (Dec.) 2002

Moreno, Robert, Spencer, Corey, and **Schexnayder, Cliff** (DEWSC), *Survey of Methods and Practices of High Performing State Highway Agencies*, Report No. FHWA-A200-489, Arizona Department of Transportation, Phoenix, AZ, (July) 2000.

Schexnayder, Cliff and Ernzen, James E. (DEWSC), NCHRP Synthesis 218, *Mitigation of Nighttime Construction Noise, Vibrations, and Other Nuisances*, Transportation Research Board, National Research Council, (July) 1999.

Cook, Neville, Fitch, W., Bennet, M., **Schexnayder, C.**, "Geotechnical Considerations," *Mining Workshop For Nuclear Waste Cleanup*, The American Society of Mechanical Engineers, New York, N.Y., 1991.

Schexnayder, C. J., *Static Finite Element Study of Soil Stress and Displacements Under a Perimeter Acquisition Radar Building*, Miscellaneous Paper S-72-15, U. S. Army Engineer

Waterways Experiment Station, Corps of Engineers, Vicksburg, Mississippi, May 1972.
Distribution limited to U. S. Government Agencies.

Schexnayder, C. J., *Check on Buckling Pressure for Sprint Launch Cell*, unpublished report, U. S. Army Engineer Waterways Experiment Station, Corps of Engineers, Vicksburg, Mississippi, 1972.

Schexnayder, C. J. and Hadala, P. F., *Constitutive Property Studies to Support In-Cell Incident Investigation at Big Black Test Site*, Technical Report, U. S. Army Engineer Waterways Experiment Station, Corps of Engineers, Vicksburg, Mississippi, April 1972.

Schexnayder, C. J., Analysis of Air-Slap-Induced Ground Motion and Allowable Dynamic Bearing Pressures at Grand Forks Remote Sprint Launch Site 1 Hampden, North Dakota, in-house report, U. S. Army Engineer Waterways Experiment Station, Corps of Engineers, Vicksburg, Mississippi, April 1971.

Windham, J. E. and **Schexnayder, C. J.**, Foundation and Materials Report, Ground Motion and Soil-Structure Interaction for SAFEGUARD Ballistic Missile Defense System MSR Site at Conrad, Montana (U), Technical Report S-70-8, U. S. Army Engineer Waterways Experiment Station, Corps of Engineers, Vicksburg, Mississippi, September 1970. SECRET

SPONSORED RESEARCH PROJECTS

Anderson, Stuart (Texas A&M); Molenaar, Keith (Univ. Colorado); and **Schexnayder, Cliff**, (DEWSC), “Procedures for Cost Estimation and Management for Highway Projects During Planning, Programming, and Reconstruction,” NCHRP Project 8-49, \$300,000, Nov. 2003.

Member, Civil Engineering Research Foundation (CERF), Independent Research Team for “Independent Research Assessment of Projects Management Factors Affecting Department of Energy Project Success,” DOE Contract No.: DE-AC01-03 ME 15807, June 2003.

Schexnayder, Cliff, *Traffic Management Studies for Reconstructing High-Volume Roadways*, U.S. Department of Transportation, Federal Highway Administration, Request for Application Number DTFH61-03-X-00014, \$10,000 plus travel, consultant to Texas A&M Research Foundation, April 1, 2003.

Schexnayder, Cliff, Sandra L. Weber, and Christine M. Fiori (DEWSC), “Best Practices and Guidelines for Project Cost Estimating,” NCHRP Project 20-7, \$60,000, June. 2002.

Schexnayder, Cliff, *Traffic Management Studies for Reconstructing High-Volume Roadways*, IPRF-FH-1(99)-002, *Task 1(99)*, Innovative Pavement Research Foundation, \$5,000, February 1, 2002.

Schexnayder, Cliff and Sandra L. Weber (DEWSC), “Owner Controlled Insurance Programs,” NCHRP Project 20-5, Topic 32-12, \$22,500, 1 March 2001.

Schexnayder, Cliff (DEWSC), “SPR Project 489: Methods and Practices of High Performing Highway Agencies,” Arizona Department of Transportation, \$21,814, 9 July 1999.

Schexnayder, Cliff and Ernzen, James E. (DEWSC), “Mitigation of Nighttime Construction Noise, Vibrations, and Other Nuisances,” NCHRP Project 20-7, Task 94, FY ‘98, \$50,000, 30 April 1998.

Mamlouk, Michael S. (Civil Engineering) and **Schexnayder, Cliff (DEWSC)**, “Civil Engineering Highway Construction and Maintenance Program,” Federal Highway Administration, Washington, D. C., DTFH61-97-R-00043, job order contract approved Aug. 1997.

RESEARCH PANELS

National Science Foundation (NSF)

Broad categories of Civil Engineering and Construction (June 1999).

U.S. Civilian Research & Development Foundation (CRDF)

Development of Guiding Technical Materials Based on the Analysis of Noise Sources and Simulation of Noise Protection in Design of Civil Engineering Machines (ISTC #2867), Proposal submitted for funding to the Science Center programs of the U.S. Department of State (2004)

National Sciences and Engineering Research Council of Canada

Collaborative Research and Development Grants (2002)

National Cooperative Highway Research Program

Expanded Use of Contractor-Provided Test Results for Acceptance on Highway Projects (NCHRP Project 10-58(02), FY 2002, panel Chair (2002-present).

Statewide Highway Letting Program Management (NCHRP SP20-5, Topic 33-09), panel member (2001-2003).

Avoiding Delays in the Delivery of Highway Construction Projects, (NCHRP Project 10-60, FY 2001), panel member (2001-present).

Issues Involving Delays in Completing Federal-aid Highway and Bridge Projects, (NCHRP Project 20-24(12)), panel member (1999-2001).

Quality Assurance of Structural Materials (NCHRP SP20-5), panel member (1998-2002).

Construction Engineering and Management Research Program (NCHRP D10-58), workshop participant (5 & 6 March 2001)

Constructibility Review Process for Transportation Facilities (NCHRP D10-42, FY 94), panel member (1994-1996).

Transit Cooperative Research Program

Managing Capital Costs of Major Federally Funded Surface Transportation Infrastructure Projects (TCRP Project G-07), FY 2002, panel member (2002-present).

STUDENT THESIS SUPERVISION (completed)

Brodetskaia, Irina, “An Examination of the Potential for Monitoring Construction Project Performance by Monitoring Lifting Equipment,” Master of Science, The Technion-Israel Institute of Technology, Haifa, Israel, June. 2004, Member.

Kamichetty, Himabindu, “Cost and Quality of Design for ADOT Projects – Comparing Design-Bid-Build and Design-Build,” Master of Science, Arizona State University, Dec. 2002, Member.

Ramdass, Sriram, Non-Thesis student, “Methodology for Evaluation of Buildings and Building Systems Using Technical and Economic Performance,” Master of Science, Arizona State University, Dec. 2002, Member.

Jonathon Byrnes, “Best Practices for Highway Project Cost Estimating,” Master of Science, Arizona State University, Dec. 2002, Co-Chair.

King, Cynthia, “Quality Management on the US60 Superstition Freeway,” Master of Science, non-thesis, Arizona State University, Nov. 2002, Member.

David, Scott, “Owner Controlled Insurance Programs for State Highway Agencies,” Master of Science, Arizona State University, Dec. 2001, Co-Chair.

Moreno, Robert, “Measurement of State Highway Agency Performance,” Honors College, Bachelor of Science, Arizona State University, April 2000, Chair.

Spencer, Robert, “Performance Measurement of State Highway Agencies,” Master of Science, Arizona State University, May 2000, Co-Chair.

Fente, Javier, “Construction Simulation Models,” Master of Science, Arizona State University, May 1999, Co-Chair

Carr, Sheryl Elise, “The Effects of Nighttime Work on Highway Construction Site Safety in Arizona,” Master of Science, Arizona State University, December 1998, Member.

Kaushik, C. Sheth, “Excavatability Issues in Cemented Soils,” Master of Science, Arizona State University, November 1998, Member.

Maio, Cristiano, “Investigation of PDF’s for Haul Cycle Simulation,” Master of Science, Arizona State University, November 1998, Co-Chair.

Rochina, Gonzalo “Distribution Choice and Data Disaggregation in Modeling Historical Estimate Data of Highway Projects,” Master of Science, Arizona State University, August 1998, Member.

Flora, Gwen, “Design-Build Benefits to Contractors,” Master of Science, Arizona State University, May 1998, Member.

Brooks, Brent, “The Effect of Payload Weight on Haul Unit Performance,” Master of Science, Arizona State University, December 1997, Member.

Chelluri, Rajsekhar Venkata, “Evaluation of Compaction Cost Implications of Different Rock Correction Equations,” Master of Science, Arizona State University, Dec. 1997, Member.

Padilla-Shahani, Kumar, “Identifying Factors that Affect Asphalt Road Construction Productivity in the State of Arizona,” Master of Science, Arizona State University, April 1997, Member.

Ohrn, Greg, “The Use of Performance-Related Specifications for Highway Construction,” Master of Science, Arizona State University, March 1997, Co-Chair.

PROFESSIONAL COMMITTEE SERVICE

American Society of Civil Engineers, Fellow (1967-present).

Committee on Annual and Specialty Conferences (CASC) (1999-2002)

Technical Activities Committee, member (1998-2001)
Technical Activities Visioning Committee, member (1996)
Management Group E, member (1994-1997).
Construction Division Executive Committee (1986-1992), chairman (1991).
Committee on Construction Equipment and Techniques (1978-1988), chairman (1982-1986).
Committee on Environmental Geotechnics, member (1993-1997).
Construction Research Council, member (1981-present).
Journal of Construction and Engineering Management, Reviewer (1986-present).
International Construction Industry Summit, Zermatt, Switzerland, Official ASCE Representative (January 2001 and February 2000)
Ernest E. Howard Award Committee, (1993-1995)

Construction Institute of ASCE

Awards Committee (2001-present)

Canadian Society for Civil Engineering, (2001-2002).

Transportation Research Board

Group 2 – Design and Construction of Transportation Facilities, Council, (Feb 1997 - Jan 2003)
Section A2F00, Construction, Chair (Feb 1997 - Jan 2003)
Committee on Construction Equipment (A2F06) (1982 - 2001), Chairman (1994 - 1997).
Committee on Transportation Earthworks, (A2K02), member (1991 - 1997).
Infrastructure Renewal Working Group, of the National Research and Technology Partnership Forum, (1999 -2002)
Task Force on Improving and Retaining the Technical Competence of Field Personnel in Flexible Pavement Construction (Gp2, Sect. D, A2D51) (1987-1990).

American Association of Engineering Societies

International Activities Commission, (2001-present)

American Road & Transportation Builders Association

Education Division, Director (2000-2005)

National Council of Examiners for Engineering and Surveying

Committee Reviewer (1995-present).
Examination Question writer: Architectural Engineering – Construction (discipline) (2002)

American Society for Engineering Education

Construction Engineering Committee, past chairman, past director.

Society of American Military Engineers, Member (1968-1998).

Vicksburg Post, past Secretary/Treasure.

Army Engineer Association (1997- present)

Society of Highway Engineers

Carolina Triangle Section, (1991-1994)

North Carolina Aggregates Association

Technical Task Force, (1991-1992)

Louisiana Engineering Society, member

National Engineers Week Committee, 1983

OTHER PROFESSIONAL AND SCIENTIFIC SERVICE

Journal Referee Service

American Society of Civil Engineers (1983 to present)

Journal of Construction Engineering and Management, (Journal of Construction Division)

Journal of Geotechnical Engineering

Special Geotechnical publications

Civil Engineering Magazine

Canadian Society for Civil Engineering (2002 to present)

Canadian Journal of Civil Engineering

Transportation Research Board (1980 to present)

Construction Equipment Committee

Transportation Earthworks Committee

Construction of Bridges and Structures Committee

Transportation Research Circulars

TR News

Elsevier Science B. V. (1996 to present)

Automation in Construction, An International Journal for the Building Industry

E. & F. N. Spon, London (2001 to present)

Construction Management and Economics

Short Course/Conference Development and Instruction

"Making Work Zones Work Better," a two-day workshop, sponsored by U.S. Department of Transportation, Federal Highway Administration, Boise, Idaho, Jan. 21 & 22, 2004.

"Making Work Zones Work Better," a two-day workshop, sponsored by U.S. Department of Transportation, Federal Highway Administration, Minneapolis, Minnesota, Dec. 16 & 17, 2003.

"Making Work Zones Work Better," a two-day workshop, sponsored by U.S. Department of Transportation, Federal Highway Administration, Springfield, Illinois, Dec. 2 & 3, 2003.

“Seminario Internacional Diseño y Construcción de Pavimentos Flexibles,” Universidad Técnica Particular de Loja, Loja, Ecuador, taught the first half on construction practice, Nov. 10-15, 2003.

“Manejo de Equipos para una Construcción Eficaz,” Curso de Extension Internacional, Universidad de Piura, Piura, Peru, August 7, 2003.

"Making Work Zones Work Better," a two-day workshop, sponsored by U.S. Department of Transportation, Federal Highway Administration, Phoenix, Arizona, June 18 & 19, 2003. Invited speaker for the *Night Time Construction* session. Presentation titled “Using Nighttime Construction to Reduce Exposure Requires Noise Control.”

"Making Work Zones Work Better," a one-day workshop, sponsored by U.S. Department of Transportation, Federal Highway Administration, Warwick Rhode Island, April 16, 2003. Invited speaker for the *Work Zone Strategies* session. Presentation titled “Using Nighttime Construction to Reduce Exposure Requires Noise Control.”

"Making Work Zones Work Better," a one-day workshop, sponsored by U.S. Department of Transportation, Federal Highway Administration, New Britain, Connecticut, April 15, 2003. Invited speaker for the *Work Zone Strategies* session. Presentation titled “Using Nighttime Construction to Reduce Exposure Requires Noise Control.”

"Making Work Zones Work Better," a two-day workshop, sponsored by U.S. Department of Transportation, Federal Highway Administration, Reno, Nevada, February 25 & 26, 2003. Invited speaker for the *Work Zone Strategies* session. Presentation titled “Using Nighttime Construction to Reduce Exposure Requires Noise Control.”

"Making Work Zones Work Better," a one-day workshop, sponsored by U.S. Department of Transportation, Federal Highway Administration, College Park, Maryland, September 26, 2002. Invited speaker for the *Work Zone Strategies* session. Presentation titled “Using Nighttime Construction to Reduce Exposure Requires Noise Control.”

“How the Contractor Approaches Bidding and Estimating,” Caterpillar Underground Utility University, Tucson, AZ, 17 Sept. 2002, Invited speaker.

"Movimiento de Tierras y Equipo Pesado," a two-day seminar, sponsored by Departamento de Ingenieria Civil, Universidad de Piura, Piura, Peru, April 26 & 27, 2002. Instructor.

"Equipo de Movimiento de Tierras y Operaciones de Flota," a two-day seminar, sponsored by Departamento de Ingenieria Civil, Universidad de Piura, Piura, Peru, April 12 & 13, 2002. Instructor.

"Operaciones de Movimiento de Tierras," a two-day seminar, sponsored by Departamento de Ingenieria Civil, Universidad de Piura, Piura, Peru, April 19 & 20, 2002. Instructor.

"Street and Highway Construction Cost Estimating," a one-day workshop for the Maricopa County Transportation Department, sponsored by Arizona State University, Tempe, Arizona, October 24, 2001. Instructor.

"Tenth International Road Federation Executive Conference on Road Management," a two-week seminar sponsored by Arizona State University, Tempe, Arizona, October 28 to November 8, 1996. Instructor.

“Project Management,” a one day of instruction for the Engineer Officer Advance Course, U.S. Army Engineer School, Fort Leonard Wood, MO, August 27, 1996. Via the T-net (satellite-TV) from Luke Air Force Base.

Presentations

Schexnayder, Cliff, “Calculation Truck Production,” The Colegio de Ingenieros del Peru, Filial Chiclayo Chiclayo, Peru, Nov. 19, 2003.

Schexnayder, Cliff, “Estimación de Costos en Megaproyectos.” Colegio de Ingenieros del Peru, Filial Chiclayo, Chiclayo, Peru, Oct. 21, 2003

Schexnayder, Cliff, “Ethics in Professional Practice,” Las Eras Cultural Center, Chiclayo, Peru, Sept. 27, 2003.

Schexnayder, Cliff, “Estimación de Costos en Megaproyectos.” Universidad National de Cajamarca, Cajamarca, Peru, Sept. 1 2003.

Schexnayder, Cliff, “Manejo de Equipos para una Construcción Eficaz,” Colegio de Ingenieros del Peru, Consejo Departamental de Cajamarca, Cajamarca, Peru, Sept. 1, 2003.

Schexnayder, Cliff, “Estimación de Costos en Megaproyectos.” XI Congreso Nacional de Estudiantes de Ingeniería Civil, Universidad de Piura, Piura, Peru, August 7, 2003.

Schexnayder, Cliff, Conferencias Magistrales, “Excelencia en la Práctica de la Construcción.” XI Congreso Nacional de Estudiantes de Ingeniería Civil, Universidad de Piura, Piura, Peru, August 6, 2003.

Schexnayder, Cliff, “Owner Controlled Insurance Programs,” Session No. 546, Owner Controlled Insurance Programs, Transportation Research Board, 81st Annual Meeting, Washington, D.C., January 2002.

Consulting Assignments

ATL, Inc., Claims review consultant for construction means and methods, and contract stipulations, Arizona, 2001-2002.

Barnhill Construction Company, Expert Witness in a civil suite involving construction safety contractual requirements, North Carolina, April 1996.

Barnhill Construction Company, Expert Witness in a civil suite involving asphalt construction techniques and contractual requirements, Fayetteville, North Carolina, February 1994.

Phillips & Jordan Construction Company, Knoxville, Tennessee, Management overview of construction estimates for North Carolina projects, March 1994 to December 1994.

Hubbard Construction Company, Expert Witness in an arbitration involving variance in compaction specifications and the affect of construction effort, Orlando, Florida, July 1994.

C. C. Mangum Inc., Expert Witness in a civil suite involving highway construction techniques, survey responsibility and practice, and contractual requirements, Research Triangle Park, North Carolina, January to June 1994.

West Equipment Company, Claims preparation review, appeal of engineer’s determination of extra work requirements for a clearing and earthwork contract, Concord, North Carolina, March 1994.

Court Appointed Head Arbitrator, Misener Marine Construction, Inc., on behalf of its subcontractor, Destiny Construction Company v. Florida Department of Transportation; Leon County Circuit Court Case No. 91-1784, October & November 1993.

T. L. James Company, Inc., Ruston, Louisiana. Responsible for supporting the planning and estimating of major heavy construction projects, September 1980 - June 1983.

Tousley-Bixler Construction Company, Developing a construction equipment management system, Indianapolis, Indiana, 1980.